



**Jordan University of Science and Technology**  
**Faculty of Veterinary Medicine**  
**Veterinary Medicine And Surgery Department**

VM223 Animal Physiology 2

First Semester 2021-2022

**Course Catalog**

2 Credit Hours. This is a continuation of general animal physiology I course in which the function of the Renal system, respiratory system, endocrinology and animal reproduction will be described. As in many learning circumstances a good memory is helpful but it will not substitute for a full, knowledgeable, logical thinking process that is required to master the discipline of physiology

**Text Book**

<b>Title</b>	Textbook of Veterinary Physiology
<b>Author(s)</b>	James G. Cunningham and Bradley G. Klein
<b>Edition</b>	4th Edition
<b>Short Name</b>	Ref-1
<b>Other Information</b>	non

**Course References**

<b>Short name</b>	<b>Book name</b>	<b>Author(s)</b>	<b>Edition</b>	<b>Other Information</b>
ref-2	Clinical Anatomy and Physiology	Thomas Colville and Joanna and Bassert	2nd Edition	non

**Instructor**

<b>Name</b>	<b>Prof. Falah Shidaifat</b>
<b>Office Location</b>	G1-L3
<b>Office Hours</b>	
<b>Email</b>	falah@just.edu.jo

**Class Schedule & Room**

## Section 1:

Lecture Time: Mon, Wed : 18:00 - 19:00

Room: منصة الكترونية

## Prerequisites

Line Number	Course Name	Prerequisite Type
661220	VM122 Animal Physiology 1	Prerequisite / Study

## Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Glomerular filtration and its regulation	From <b>Ref-1</b>
Week 2	Tubular processing of glomerular filtrate	From <b>Ref-1</b>
Week 3	Regulation of water and electrolyte balance	From <b>Ref-1</b>
Week 4	Acid-base balance	From <b>Ref-1</b>
Week 5	Lung ventilation	From <b>Ref-1</b>
Week 6	Pulmonary blood flow and concepts of ventilation perfusion ratio	From <b>Ref-1</b>
Week 7	Gas exchange and gas transport	From <b>Ref-1</b>
Week 8	Control of ventilation	From <b>Ref-1</b>
Week 9	Overview of general principles of endocrine system and hormones	From <b>Ref-1</b>
Week 10	Hypothalamus and pituitary gland	From <b>Ref-1</b>
Week 11	Hormones of the adrenal gland	From <b>Ref-1</b>
Week 12	Thyroid and parathyroid gland	From <b>Ref-1</b>
Week 13	Hormones of the pancreas	From <b>Ref-1</b>
Week 14	Hormonal regulation of reproductive system Embryology and Male reproductive patterns	From <b>Ref-1</b>
Week 15	Female Reproductive cycles and sexual behavior	From <b>Ref-1</b>
Week 16	Pregnancy, parturition and lactation	From <b>Ref-1</b>

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To know and understand the function of renal system in urine formation and its function in the regulation of water and electrolyte balance and blood pressure and acid-base balance	25%	

To under the respiratory system physiology including the physiological processes of inspiration, expiration, pulmonary circulation, gas diffusion and transportation and regulatory mechanisms of ventilation.	25%	
To understand the Endocrine system of animals and the physiological role of all hormones of the endocrine system	25%	
To know the male and female reproductive pattern and to understand the hormonal regulation of those patterns	25%	

Relationship to Program Student Outcomes (Out of 100%)									
1	2	3	4	5	6	7	8	9	10

Policy	
Teaching and Learning strategies	A combination of online power point lectures and discussion through Microsoft teams which will be supplemented with audiovisual materials and reading materials

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